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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,412	02/22/2001	Takayuki Araki	Q63262	5072

7590 02/21/2003

Sughrue Mion Zinn Macpeak & Seas
2100 Pennsylvania Avenue N W
Washington, DC 20037-3202

EXAMINER

ZACHARIA, RAMSEY E

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 02/21/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,412

Applicant(s)

ARAKI ET AL.

Examiner

Ramsey Zacharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Language

2. The Applicant is requested insert a positive recitation of the substrate in the preamble of claim 1 to avoid confusion (such as from "thin coating film" to --thin coating film on a substrate, the thin coating film--). This would not further limit the claims as the film as claimed is already recited as a coating film that is adhered directed to a substrate.

Claim Rejections - 35 USC § 102

3. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Araki et al. (WO97/48774).

Araki et al. is directed to a coating composition, a method of coating, and a coated article. The coating composition comprises particles of a fluorine containing polymer prepared by copolymerizing a fluorine containing ethylenic monomer having a functional group such as hydroxyl, carboxyl or a carboxylic salt and a solvent. In a preferred embodiment, the fluorine containing polymer comprises a copolymer of 0.05-50 mole% of the functional monomer and 50-99.95 mole% of tetrafluoroethylene. In the embodiment of Preparation Example 3, the polymer is an aqueous dispersion and has a melting temperature of 314 °C. The coating composition comprises 30-99.9 wt% of solvent and at least 0.1 wt% to no more than 70 wt% of

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polymer. To maintain dispersion stability, storage stability, and transparency of the coated film, the particle size of the polymer should be about 0.01 μm to not more than 0.2 μm (i.e. 10-200 nm). For coatings wherein the polymer has a high melt viscosity and is not melted, such as PTFE, the coating is baked at a temperature higher than the melting point of the polymer. Water repellant coatings applied to glass substrates preferably have a thickness of 0.01 to 2 μm .

Response to Arguments

4. Applicant's arguments filed 09 December 2002 have been fully considered but they are not persuasive.

The applicants argue that Araki et al. do not disclose a continuous layer of fluorine containing polymer but rather a layer comprising particles of fluorine containing polymer dispersed in a binder of metal oxide gel.

This is not persuasive for the following reasons. The layer taught by Araki et al. comprises as much as 85 vol% of fluorine containing polymer particles uniformly dispersed in the metal oxide gel (see column 10, lines 10-22). Uniformly distributing as much as 85 vol% of polymer particles in a layer will necessarily result in a layer that comprises a continuous layer of the polymer particles.

Furthermore, with respect to claim 8, this claim is directed to an aqueous dispersion. Therefore the question as to whether or not the layer formed from this dispersion comprises a continuous layer of fluorine-containing polymer is moot since the claim is directed to the coating composition and not the final coated article.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (703) 305-0503. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non after-final correspondences and (703) 872-9311 for after-final correspondences.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'RZL', with a horizontal line extending from the end.

Ramsey Zacharia
Patent Examiner
Technology Center 1700
2/13/03